

6677

6677/6CL6
POWER PENTODE

9-PIN MINIATURE TYPE

For use in mobile communications equipment

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:
- Voltage . . . . 6.3 ± 20%* . . . . ac or dc volts
- Current at 6.3 volts . . 0.65 . . . . amp

Direct Interelectrode Capacitances:°

Grid No.1 to plate	0.12 max.	$\mu\mu$f
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	11	$\mu\mu$f
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	5.5	$\mu\mu$f

Mechanical:

Operating Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	*See General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW	9BV

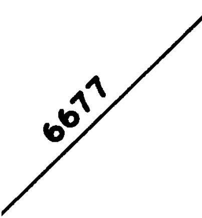
Pin 1 - Cathode
Pin 2 - Grid No.1
Pin 3 - Grid No.2
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Plate
Pin 7 - Grid No.3, Internal Shield
Pin 8 - Grid No.2
Pin 9 - Grid No.1

AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	330 max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE	0 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	330 max.	volts
GRID-No.2 VOLTAGE	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
GRID-No.2 INPUT:		
For grid-No.2 voltages up to 165 volts	2 max.	watts
For grid-No.2 voltages between 165 and 330 volts	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



6677/6CL6

POWER PENTODE

PLATE DISSIPATION	8.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	100 max.	volts
Heater positive with respect to cathode .	100 max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	210 max.	°C

Typical Operation and Characteristics:

Heater Voltage.	6.3	volts
Plate Voltage	250	volts
Grid No.3	*Connected to cathode at socket*	
Grid-No.2 Voltage	150	volts
Grid-No.1 Voltage	-3	volts
Peak AF Grid-No.1 Voltage	3	volts
Zero-Signal Plate Current	30	ma
Max.-Signal Plate Current	31	ma
Zero-Signal Grid-No.2 Current	7	ma
Max.-Signal Grid-No.2 Current	7.2	ma
Plate Resistance (Approx.).	0.15	megohm
Transconductance.	11000	μmhos
Load Resistance	7500	ohms
Total Harmonic Distortion	8	%
Max.-Signal Power Output.	2.8	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation.	0.1 max.	megohm
For cathode-bias operation.	0.5 max.	megohm

* When the heater is operated from storage-battery-with-charger supply or similar supplies, the normal battery-voltage fluctuation may be as much as 35 per cent or more. Although such variation in heater voltage is permissible for short periods, reliability can be increased with improved supply-voltage regulation.

° Without external shield.

SPECIAL RATINGS & PERFORMANCE DATA

Heater-Cycling Life Performance:

This test is performed on a sample lot of tubes from each production run. A minimum of 2000 cycles of intermittent operation is applied under the following conditions: heater volts = 7.5 cycled one minute on and one minute off, heater 135 volts positive with respect to cathode, and all other elements connected to ground. At the end of this test, tubes are checked for heater-cathode shorts and open circuits.

Transconductance at Reduced Heater Voltage:

Average Value.	8800	μmhos

With heater volts = 5, plate volts = 250, grid No.3 connected to cathode at socket, grid-No.2 volts = 150, and grid-No. 1 volts = -3.